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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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1585 BROADWAY				ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

7	Application No.	Applicant(s)				
	09/933,264	ABDOLLAHI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Joshua Joo	2154				
The MAILING DATE of this communication app	pears on the cover sheet with	the correspondence address				
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM						
THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a replant of the period for reply specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply y within the statutory minimum of thirty (30 will apply and will expire SIX (6) MONTHS e, cause the application to become ABANI	be timely filed  D) days will be considered timely.  From the mailing date of this communication.  DONED (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>23 /</u>	larch 200 <u>5</u> .					
2a) This action is <b>FINAL</b> . 2b) This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims		•				
4) Claim(s) <u>1-30</u> is/are pending in the application						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-30</u> is/are rejected.	•					
<ul> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/o</li> </ul>	or election requirement					
o) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
-	a maiorithe condon 25 H C O C 44	10(a) (d) an (6				
12) Acknowledgment is made of a claim for foreign pnority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documen	ts have been received.					
Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Burea	• • • • • • • • • • • • • • • • • • • •	•				
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)		·				
1) Notice of References Cited (PTO-892)	4) 🔲 Interview Sum	mary (PTO-413)				
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date</li> </ul>	Paper No(s)/M	fail Date mal Patent Application (PTO-152)				
U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) Office A	ction Summary	Part of Paper No./Mail Date 2				

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1. Claims 1-30 are presented for examination.

## Claim Rejections - 35 USC § 101

2. Claims 6-8 are rejected under 35 U.S.C. 101 because the invention is not limited to tangible embodiments (e.g., signal). As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1, 2, 6-11, 15-17, 21-26, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gosselin, US Patent #6,738,639 and in view of Bremer et al, US Patent #6,553,002 (Bremer hereinafter).
- 5. As per claims 1 and 16, Gosselin teaches substantially the invention as claimed including the method and apparatus for creating multicast groups of nodes and transmitting messages that identify the multicast group. Gosselin's teachings comprise of:
- a) dividing a plurality of nodes into one or more groups, including a particular group of two or more nodes (CoI 6, lines 21-26. Base stations are associated to form groups. CoI 7, lines 20-23. Group located on same network.);

b) receiving a specification to send a set of one or more messages from a source to the particular group of nodes, the specification designating the particular group and not specifying any particular group (Col 7, lines 24-29. Transmits a unicast message specifying the desired multicast group address as the destination address. Col 6, lines 48-50. Group address does not identify a particular base station.); and

- c) if each node of the particular group has a return path to the source then, for each given node of the particular group (Col 4, lines 66 Col 5, line 2. Base station communicates with the MSC.):
- d) transmitting from the source a packet containing a network layer header, including an address corresponding to the given node, but not the other nodes, of the particular group, and one or more messages of the set, (Col 9, lines 46-50. Mobile switch center (MSC) transmits a message to the host address associated with the base station.), and
- e) waiting to receive at the source a response packet acknowledging proper receipt of the packet from the given node (CoI 9, line 65-CoI 10, line 2. MSC waits for response.),

wherein an operator can specify a given list of messages for execution by an entire group of the nodes by reference to an indication of the group, rather than by separately specifying each given node of that group at the time of specifying the given list of messages to be executed (Col 9, lines 20-24. Center sends messages using the group's group address. Col 6, lines 48-50. Group address does not identify a particular base station. Col 6, line 66-Col 7, line 2; Col 7, lines 25-29. Messages.).

6. Gosselin does not teach of a second header specifying a syntax and semantic by which the packet may be parsed.

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7. Bremer teaches of routing packets in a communications network, where the packet contains a header that stores data, information regarding how it will be parsed, and the address of the destination (Col 6, lines 29-51).

- 8. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Gosselin and Bremer because both teachings deal with transmitting messages through a communication network. Furthermore, the teachings of Bremer for the packets to contain information regarding parsing of the packet would improve the teachings of Gosselin's by allowing Gosselin's node to properly process the received message and response to the message.
- 9. As per claims 2 and 17, Gosselin teaches the method and apparatus wherein the packet is transmitted to a second one of the given nodes of the particular group at the time of, or after, transmitting the packet to a first one of the given nodes of the particular group but before receipt of the response packet from the first given node of the particular group acknowledging receipt of the packet transmitted thereto (Col 9, lines 20-23. MSC sends a multicast message to the nodes using the multicast group address.).
- 10. As per claims 6 and 21, Gosselin teaches a signal including said packet formed by the method of claim 1 (Col 5, lines 5-7. MSC communicates signaling information to the stations.).
- 11. As per claims 7 and 22, a storage device for storing said signal of claim 6 (Col 5, lines 5-7. MSC.).

12. As per claims 8 and 23, Gosselin teaches a receiver for receiving said signal of claim 6 (Col 5, lines 5-7. Base station.).

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- 13. As per claims 9 and 24, Gosselin teaches the method and apparatus, wherein the source knows, prior to said step (d), each of said addresses corresponding respectively to one of the given nodes of the particular group (Col 9, lines 12-15. MSC sends commands to each base station.).
- 14. As per claims 10 and 25, Gosselin teaches the method and apparatus, further comprising the step (d1) of, prior to said step (d) storing, at the source, each of said addresses corresponding respectively to one of the given nodes of the particular group (Col 6, line 64-Col 7, line 2; Col 9, lines 12-15. MSC sends commands to each base station. It is inherent that the center has the addresses stored to be able to communicate with the base stations.).
- 15. As per claims 11 and 26, Gosselin teaches the method of claim 1, further comprising, prior to said step (d), a step (d1) of obtaining, at the source, each of said addresses corresponding respectively to one of the given nodes of the particular group (Col 6, line 64-Col 7, line 2; Col 9, lines 12-15. Center sends commands to each base station. It is inherent that the center has obtained the addresses by some means to be able to communicate to the base stations.).
- As per claims 15 and 30, Gosselin teaches the method and apparatus, further comprising the step of: (a1) prior to said step (a), obtaining, at the source, a plurality of addresses, each of the plurality of addresses being a unicast address for a respective one of the

given nodes of the particular group (Col 9, lines 12-15. MSC sends a message to each base station informing of the multicast group. Thus, it is inherent that the MSC obtained the addresses of the base station through some means.),

wherein said step (a) of dividing, performed subsequent to obtaining the plurality of addresses, is achievable entirely at the source without communication of messages from or to the source and without communication of messages among any of the plurality of to-be-managed nodes (Col 6, lines 31-35. MSC forms a multicast group based on area location, frequency channel, etc... Col 9, lines 12-15. MSC informs the base stations of the formed group.).

- 17. Claims 3-5, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gosselin and Bremer and in view of Kekic et al, US Patent #5,999,179 (Kekic hereinafter).
- 18. As per claims 3 and 18, Gosselin teaches the method and apparatus wherein each given node of the particular group has a return path to the source ((Col 4, lines 66 Col 5, line 2. Base station communicates with the MSC.). However, Gosselin does not teach wherein one of the one or more messages in the packet is a request to retrieve a specific information obtainable from each given node of the particular group, the method further comprising the step of:
- f) receiving from each given node of the particular group a current value of the specific information obtainable from the respective given node.
- 19. Kekic teaches of a client-server network management system, where a managed network element replies to the requested information from the server (Col 15, lines 59-60).

- 20. It would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Gosselin, Bremer, and Kekic because the teachings of Kekic to have the ability to receive specific information from the managed elements would improve the capability of Gosselin's teachings by allowing the server to communicate with the nodes and allowing the server to manage and control the elements from remote locations.
- 21. As per claims 4 and 19, Gosselin does not teach the method and apparatus wherein each given node of the group contains at least a portion of a hierarchically organized management information base (MIB), the method comprising the step of displaying on a display device the hierarchical organization of the MIB and a list of specific parameters of the MIB to be accessed.
- 22. Kekic teaches of displaying the hierarchical representation of the information (Fig 3B, 305; Col 15, lines 10-16), displaying and setting MIB variables (Col 28, lines 32-39), and nodes containing hierarchical based MIB variables (Col 23, lines 54-62 and Col 24, lines 34-40.)
- 23. It would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Gosselin, Bremer, and Kekic because the teachings of Kekic to display the organization of the MIB and the variables on a screen would improve the efficiency of Gosselin's invention by providing a way to manage changing network elements, and through a visual reference, the server can quickly obtain information regarding the status of network elements.
- 24. As per claims 5 and 20, Gosselin does not teach the method and apparatus wherein each node of the group has a return path to the source of commands and wherein the command

is a request to retrieve a specific information corresponding to the list of specific parameters, the method further comprising the steps of: receiving from each given node of the group a current value of the specific information corresponding to the list of specific parameters, and displaying a current value of each specific parameter of the list.

- 25. Kekic teaches an invention for: a managed network element replying to a requested information from the server (Col 15, lines 59-60), and displaying and monitoring the attributes of network elements, where the user can click on one of several attributes of the element to obtain values regarding the element (Col 27, lines 20-31).
- 26. It would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Gosselin, Bremer, and Kekic because the teachings of Kekic to use display the variables on a screen would improve the efficiency of Gosselin's invention by providing a way to manage changing network elements, and through a visual reference, the server can quickly obtain information regarding the status of network elements. Kekic's invention provides a method to remotely monitor and control elements in Gosselin's invention.
- Claims 12-14, 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gosselin and Bremer and in view of Waclawsky et al, US Patent #6,628,610 (Waclawsky hereinafter).
- 28. As per claims 12-14, 27-29, Gosselin teaches of transmitting a message to a base station (Col 7, lines 13-17; Col 9, lines 46-50) and receiving response from the base station (Col 9, lines 60-67). However, Gosselin does not teach not teach the method, wherein step (d) enables the source to control a rate of transmission of packets to the given node of the

particular group, to control a rate of reception of response packets from the given node of the particular group, or said step (d) enabling the source to control how many of the given nodes of the particular group issue a response packet to the source within a given time period.

- 29. Waclawsky teaches that the source can control the transmission rate of packets to the receivers (Col 15, lines 50-53).
- 30. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teachings of Gosselin and Waclawsky because the teachings of Waclawsky to vary the transmission rate of packets would improve the quality of service of Gosselin's invention by preventing or reducing the congestion of the network and allowing the system of Gosselin to adjust the transmission rate according to the conditions of the network.

### Response to Arguments

- 31. Applicant's arguments filed 3/23/2005 have been fully considered but they are not persuasive.
- 32. Applicant argued that (1) The present invention does not reside merely in the use of unicast addressing, but rather more broadly provides the advantages of group control in combination with unicast addressing and without the structural limitations necessary in prior art source/node configurations such as in Gosselin; (2) Applicants submit that it would not have been obvious whether or how to modify Gosselin, such as by reference to any of the other prior art cited in the Office Action, to use unicast addressing with group control, as defined in the pending claims; (3) The present invention as defined in the pending claims avoids "chatty" problem because it does not require the inter-communicating router nodes in Gosselin's

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structure, and; (4) The other references cited in the Office Action are each directed to a form of unicast messaging. However, Applicants have not found any teaching or suggestion therein of communicating with a group of nodes by designating a group, yet transmitting one unique copy of the message in unicast format to each member of the group form the source node.

Examiner traverses the arguments:

- As to point (1), even though the prior art features additional components as noted by the Applicant, the prior art, Gosselin, teaches the method and apparatus of the claimed invention. Also, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. lack of the structural limitations) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
- 35. As to point (2), in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Kekic teaches of how to efficiently manage networks that are changing and growing (Col 5, lines 30-37), thus Kekic provides the motivation to combine the references of Gosselin and Kekic. As per Waclawsky, Waclawsky teaches of changing policy

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schemes based on conditions with the communication network (Abstract) to improve the quality of service, thus Waclawsky provides the teachings to combine the references of Gosselin and Walclawsky.

- 36. As to point (3), In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. no requirement of the inter-communicating router nodes) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
- 37. As to point (4), Gosselin teaches of designating a group by addressing the group through a multicast group address (Col 6, lines 44-50). The MSC may send a message in unicast format that specifies the desired multicast group address (Col 7, lines 26-29). In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

#### Conclusion

38. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

- 39. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is 571 272-3966. The examiner can normally be reached on Monday to Friday 7 to 4.
- 40. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on 571 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
- Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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May 12, 2005 JJ

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
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